

April 3, 2001

Dennis Wheeland  
Applied Industrial Materials Corporation  
P.O.Box 340  
Aurora, IN 47001

Re: 029-13867  
First Minor Permit Revision to  
MSOP 029-11447-00023

Dear Dennis Wheeland:

Applied Industrial Materials Corporation was issued a minor source operating permit on August 08, 2000 for a custom blended metallurgical processing source, which only colors and packages. A letter requesting a revision to this permit was received on February 12, 2001. Pursuant to the provisions of 326 IAC 2-6.1-6 (g)(5)(c) a minor permit revision to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of adding a new Bucket Elevator which is controlled by a Baghouse for existing Briquette Bin.

The following construction conditions are applicable to the proposed project:

1. The data and information supplied with the application shall be considered part of this permit revision approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Pursuant to IC 13-15-5-3, this approval to construct becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 (Revocation), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Pursuant to 326 IAC 2-6.1-6, the minor source operating permit shall be revised by incorporating the minor permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. The Office of Air Management has changed its name to Office of Air Quality. This change has been incorporated in the permit. Find enclosed the entire Permit document which contains the revised pages to incorporate operating conditions for this modification. This Permit will expire on August 16, 2005.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Gurinder Saini, at OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for Gurinder Saini or extension 3-0203, or dial (317) 233-0203.

Sincerely,

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

Attachments

GS

cc: File - Dearborn County  
U.S. EPA, Region V  
Dearborn County Health Department  
Air Compliance Section Inspector - Warren Greilling  
Compliance Data Section - Karen Nowak  
Administrative and Development - Janet Mobley  
Technical Support and Modeling - Michele Boner

# **MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY**

**Applied Industrial Materials Corporation  
133 Franklin Street  
Aurora, Indiana 47001**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 029-11447-00023	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: August 16, 2000  Expiration Date: August 16, 2005
First Minor Permit Revision: 029-13867	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality Original Signed by Paul Dubenetzky	Issuance Date :April 3, 2001

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## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a custom blended metallurgical processing source, which only colors and packages.

Authorized Individual: Dennis Wheeland  
Source Address: 133 Franklin Street, Aurora, Indiana 47001  
Mailing Address: P. O. Box 340, Aurora, Indiana 47001  
Phone Number: 812-926-3399  
SIC Code: 3295  
County Location: Dearborn  
County Status: Attainment for all criteria pollutants  
Source Status: Minor Source Operating Permit  
Minor Source, under PSD;  
Minor Source, Section 112 of the Clean Air Act

### A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

- (a) Five (5) storage bins (#1 - #5), collectively known as Unit 1, installed in 1990, each equipped with a baghouse for particulate matter control, exhausted to stacks S1a through S1e, capacity: 20 tons of aggregate per hour total.
- (b) One (1) natural gas-fired rotary dryer, known as Unit 2, installed in 1990, equipped with a baghouse and cyclone for particulate matter control, exhausted to stack S2, rated at 5.0 million British thermal units per hour, capacity: 10 tons of aggregate per hour.
- (c) One (1) material transfer and conveying area, known as Unit 3, capacity: 20 tons of aggregate per hour, consisting of:
  - (1) Three (3) product storage bins (#9, #10 and #12), each equipped with a baghouse, exhausted to stacks S3a through S3c.
  - (2) One (1) Briquette bin (#13), installed in July 1999, equipped with a baghouse, exhausted to stack S3d, capacity: 18.0 tons of aggregate.
  - (3) One (1) mixer, equipped with a baghouse, exhausted to stack S3e.
  - (4) One (1) load out bin (#11), equipped with a baghouse, exhausted to stack S3f.
- (d) One (1) natural gas-fired heater, known as H3, installed in 1997, exhausted to stack S4, rated at 0.10 million British thermal units per hour.
- (e) Two (2) natural gas-fired heaters, known as H1 and H2, installed in 1992, exhausted to

general ventilation rated at 0.15 and 0.175 million British thermal units per hour, respectively.

- (f) one (1) bucket elevator for loading the Briquette bin, with a maximum capacity of 36 tons per hour and using a baghouse to control dust, and exhausting to stack 4.

All requirements and conditions of this operating permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of operating permits pursuant to 326 IAC 2 (Permit Review Rules).



## SECTION C

## SOURCE OPERATION CONDITIONS

Entire Source
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### C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

- (a) The total source potential to emit after controls of any criteria pollutant is less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) Any change or modification which may increase potential to emit to 10 tons per year of any single hazardous air pollutant, twenty-five tons per year of any combination of hazardous air pollutants, or 100 tons per year of any other regulated pollutant from this source, shall cause this source to be considered a major source under Part 70 Permit Program, 326 IAC 2-7, and shall require approval from IDEM, OAQ prior to making the change.
- (c) Any change or modification which may increase potential to emit after controls to 250 tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAQ prior to making the change.

### C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ,. IDEM, OAQ, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

### C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

#### C.4 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.  
[326 IAC 2-7-6(6)]

#### C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)]:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

#### C.6 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.

- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

**C.7 Opacity [326 IAC 5-1]**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

**C.8 Fugitive Dust Emissions [326 IAC 6-4]**

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

**C.9 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]**

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on April 6, 2000. The plan consists of:

- (a) All travel surfaces within the plant are paved,
- (b) All bulk materials that have the potential to create fugitive dust are stored within three-sided buildings or under tarps on paved pads; and
- (c) All road surfaces are swept on an as needed basis.

**C.10 Stack Height [326 IAC 1-7]**

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

**Testing Requirements**

**C.11 Performance Testing [326 IAC 3-6] [326 IAC 2-1.1-11]**

- (a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326

IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

## **Compliance Monitoring Requirements**

### **C.12 Compliance Monitoring [326 IAC 2-1.1-11]**

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

### **C.13 Maintenance of Monitoring Equipment [IC 13-14-1-13]**

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

### **C.14 Monitoring Methods [326 IAC 3]**

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

### **C.15 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]**

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

- (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this permit;
  - (3) The Compliance Monitoring Requirements in Section D of this permit;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
  - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
    - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
    - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
- (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
  - (3) An automatic measurement was taken when the process was not operating; or
  - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.

**C.16 Actions Related to Noncompliance Demonstrated by a Stack Test**

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee

shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected emissions unit while the corrective actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ reserves the authority to use enforcement activities to resolve noncompliant stack tests.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected emissions unit.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

## **Record Keeping and Reporting Requirements**

### **C.17 Malfunctions Report [326 IAC 1-6-2]**

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

### **C.18 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]**

- (a) With the exception of performance tests conducted in accordance with Section C- Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or

perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.

- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

**C.19 General Record Keeping Requirements [326 IAC 2-6.1-2]**

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- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were

performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

- (d) All record keeping requirements not already legally required shall be implemented when operation begins.

C.20 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi-annual Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

- (d) Unless otherwise specified in this permit, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
- (2) A malfunction as described in 326 IAC 1-6-2; or
- (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
- (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.



- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

C.21 Annual Notification [326 IAC 2-6.1-5(a)(5)]

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- (a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:  
  
Compliance Data Section, Office of Air Quality  
Indiana Department of Environmental Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, IN 46206-6015
- (d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

## SECTION D.1

## EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (a) Five (5) storage bins (#1 - #5), collectively known as Unit 1, installed in 1990, each equipped with a baghouse for particulate matter control, exhausted to stacks S1a through S1e, capacity: 20 tons of aggregate per hour total.
- (b) One (1) natural gas-fired rotary dryer, known as Unit 2, installed in 1990, equipped with a baghouse and cyclone for particulate matter control, exhausted to stack S2, rated at 5.0 million British thermal units per hour, capacity: 10 tons of aggregate per hour.
- (c) One (1) material transfer and conveying area, known as Unit 3, capacity: 20 tons of aggregate per hour, consisting of:
  - (1) Three (3) product storage bins (#9, #10 and #12), each equipped with a baghouse, exhausted to stacks S3a through S3c.
  - (2) One (1) Briquette bin (#13), installed in July 1999, equipped with a baghouse, exhausted to stack S3d, capacity: 18.0 tons of aggregate.
  - (3) One (1) mixer, equipped with a baghouse, exhausted to stack S3e.
  - (4) One (1) load out bin (#11), equipped with a baghouse, exhausted to stack S3f.
- (d) One (1) natural gas-fired heater, known as H3, installed in 1997, exhausted to stack S4, rated at 0.10 million British thermal units per hour.
- (e) Two (2) natural gas-fired heaters, known as H1 and H2, installed in 1992, exhausted to general ventilation rated at 0.15 and 0.175 million British thermal units per hour, respectively.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

#### D.1.1 Nonattainment Area Particulate Limitations [326 IAC 6-1-2]

Pursuant to this rule, the particulate matter emissions from the Baghouses controlling the Unit 1, Unit 2 and Unit 3 shall not exceed 0.03 grains per dscf from each emission unit.

#### D.1.2 Nonapplicability of NSPS Subpart OOO

This source is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.670, Subpart OOO), because as per the definition of Nonmetallic Mineral Processing facility, the processing of nonmetallic minerals must include crushing or grinding.

In the revisions to Subpart OOO, published in the June 9, 1997 Federal Register on page 31354, the comments section specifically clarifies that EPA did not intend to regulate stand-alone screening operations at plants that have no crushers. Plants that do not employ crushing or grinding, by definition, are not considered nonmetallic mineral processing plants and thus are not subject to Subpart OOO.

Therefore, since this source only colors and packages aggregate, NSPS Subpart OOO is not applicable to this source.

#### D.1.3 PM<sub>10</sub> Emission Limit

- (a) The PM<sub>10</sub> emission rate from Unit 3 shall not exceed 16.0 pounds per hour. This emission limit is equivalent to an emission factor of 0.800 pounds of PM<sub>10</sub> per ton of material handled, before control, at a process weight rate of 20 tons per hour.
- (b) This PM<sub>10</sub> emission limit for Unit 3 will insure that the potential PM<sub>10</sub> emissions from the entire source will not exceed one hundred (100) tons per year.

#### D.1.4 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this emissions unit and its control device.

### Compliance Determination Requirements [326 IAC 2-1.1-11]

#### D.1.5 Testing Requirements [326 IAC 2-1.1-11]

- (a) During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform PM testing on the Unit 2 stack exhaust, S2, because the potential to emit PM is greater than 40% of the source's total potential to emit PM. The testing shall utilize Methods 5 or 17 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance.
- (b) During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform PM<sub>10</sub> testing on the Unit 3 stack exhausts, S3a through S3f, to confirm the PM<sub>10</sub> emission factor. The PM<sub>10</sub> emission factor is based on the PM emission factor of 2.2 pounds per ton of sand handled (AP-42) multiplied by 24%, which was obtained from the particle size distribution for uncontrolled emissions of PM with a diameter less than 10.0 Fm (AP-42 Table 11/25-8). The testing shall utilize Methods 201 or 201A and 202 (40 CFR 51, Appendix M) or other methods as approved by the Commissioner. PM<sub>10</sub> includes filterable and condensable PM<sub>10</sub>. This testing does not have to be repeated, if the emission factor is determined to be 0.798 pounds of PM<sub>10</sub> per ton of sand handled or less. This emission factor, combined with the emission factors from the rest of the source, will insure that PM<sub>10</sub> emissions are less than 100 tons per year. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance.
- (c) The Permittee is not required to test the Unit 1 stacks by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the PM limits specified in Condition D.1.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### D.1.6 Particulate Matter (PM)

- (a) The baghouses for PM control shall be in operation and control emissions from Unit 1 and Unit 3 at all times that talc processing, conveying and mixing processes are in operation.
- (b) The baghouse and cyclone for PM control shall be in operation and control emissions from Unit 2 at all times that the rotary dryer is in operation.

## **Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]**

### **D.1.7 Visible Emissions Notations**

- (a) Daily visible emission notations of the Unit 1, Unit 2 and Unit 3 stack exhausts shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

### **D.1.8 Parametric Monitoring**

- (a) The Permittee shall record the total static pressure drop across baghouses S1a through S1e used in conjunction with the storage bins, at least once weekly when the process is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across baghouses S1a through S1e shall be maintained within the range of 2.0 and 3.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

- (b) The Permittee shall record the total static pressure drop across baghouse S2 used in conjunction with the rotary dryer, at least once weekly when the drying process is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across baghouse S2 shall be maintained within the range of 3.0 and 4.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

- (c) The Permittee shall record the total static pressure drop across baghouses S3a through S3f used in conjunction with the transfer and conveying area, at least once weekly when the process is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across baghouse S3 shall be maintained within the range of 2.0 and 3.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall

contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### D.1.9 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling Unit 1, Unit 2 and Unit 3 when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

#### D.1.10 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

#### D.1.11 Cyclone Inspections

An inspection shall be performed each calendar quarter of the cyclones controlling Unit 2 when venting to the atmosphere. A cyclone inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors.

#### D.1.12 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

### **Record Keeping and Reporting Requirement [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]**

#### D.1.13 Record Keeping Requirements

- (a) To document compliance with Condition D.1.6, the Permittee shall maintain records of daily visible emission notations of Unit 1, Unit 2 and Unit 3 stack exhausts.
- (b) To document compliance with Condition D.1.8, the Permittee shall maintain records of the results of the inspections required under Condition D.1.8 and the dates the vents are redirected.
- (c) To document compliance with Condition D.1.10, the Permittee shall maintain records of the results of the inspections required under Condition D.1.10 and the dates the vents are redirected.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.2

## EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (f) one (1) bucket elevator for loading the Briquette bin, with a maximum capacity of 36 tons per hour and using a baghouse to control dust, and exhausting to stack 4.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

#### D.2.1 Nonattainment Area Particulate Limitations [326 IAC 6-1-2]

Pursuant to this rule, the particulate matter emissions from the Baghouse controlling the Bucket Elevator shall not exceed 0.03 grains per dscf.

#### D.2.2 Particulate Matter Control Device [326 IAC 2-6.1-6 (g)(5) (C)]

Pursuant to this rule, the baghouse should be operated with a control efficiency of 99%. Therefore, this modification is not subject to 326 IAC 2-6.1-6 (j) Significant Permit Revision Procedure.

#### D.2.3 Nonapplicability of NSPS Subpart OOO

This source is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.670, Subpart OOO), because as per the definition of Nonmetallic Mineral Processing facility, the processing of nonmetallic minerals must include crushing or grinding.

### Compliance Determination Requirements [326 IAC 2-1.1-11]

#### D.2.4 Testing Requirements [326 IAC 2-1.1-11]

Within six (6) months of issuance of this permit, the Permittee shall perform PM and PM10 testing on the baghouse stack exhaust 4 to show compliance with conditions D.2.1 and D.2.2. The testing shall utilize Methods 5 or 17 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM10 includes filterable and condensable PM10. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance.

#### D.2.5 Baghouse

The baghouse shall be in operation and control emissions from the bucket elevator at all times, when the bucket elevator is in operation, in order to comply with this limit.

### Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

#### D.2.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across baghouse used in conjunction with the bucket elevator, at least once weekly when the loading/unloading process is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across this baghouse shall be maintained within the range of 3.0 and 4.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### D.2.7 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling bucket elevator when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

#### D.2.8 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

### **Record Keeping and Reporting Requirement [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]**

#### D.2.9 Record Keeping Requirements

- (a) To document compliance with Condition D.2.5, the Permittee shall maintain records of the results of the inspections required under Condition D.2.5 and the dates the vents are redirected.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**Indiana Department of Environmental Management**  
**MALFUNCTION REPORT**

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**  
**OFFICE OF AIR QUALITY**  
**FAX NUMBER - 317 233-5967**

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6  
and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?\_\_\_\_\_, 25 TONS/YEAR SULFUR DIOXIDE ?\_\_\_\_\_, 25 TONS/YEAR NITROGEN OXIDES ?\_\_\_\_\_, 25 TONS/YEAR VOC ?\_\_\_\_\_, 25 TONS/YEAR HYDROGEN SULFIDE ?\_\_\_\_\_, 25 TONS/YEAR TOTAL REDUCED SULFUR ?\_\_\_\_\_, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?\_\_\_\_\_, 25 TONS/YEAR FLUORIDES ?\_\_\_\_\_, 100 TONS/YEAR CARBON MONOXIDE ?\_\_\_\_\_, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?\_\_\_\_\_, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?\_\_\_\_\_, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?\_\_\_\_\_, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?\_\_\_\_\_. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION \_\_\_\_\_.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC \_\_\_\_\_ OR, PERMIT CONDITION # \_\_\_\_\_ AND/OR PERMIT LIMIT OF \_\_\_\_\_

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ?    Y        N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ?    Y        N

COMPANY: Applied Industrial Materials Corporation    PHONE NO. : 812 - 926 - 3399  
LOCATION: (CITY AND COUNTY) Aurora / Dearborn  
PERMIT NO. 029-11447    AFS PLANT ID: 029-00023    AFS POINT ID: \_\_\_\_\_    INSP: \_\_\_\_\_  
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: \_\_\_\_\_

DATE/TIME MALFUNCTION STARTED: \_\_\_\_\_ / \_\_\_\_\_ / 20\_\_\_\_    \_\_\_\_\_    AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: \_\_\_\_\_

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE \_\_\_\_\_ / \_\_\_\_\_ / 20\_\_\_\_    \_\_\_\_\_    AM / PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO<sub>2</sub>, VOC, OTHER: \_\_\_\_\_

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: \_\_\_\_\_

MEASURES TAKEN TO MINIMIZE EMISSIONS: \_\_\_\_\_

**REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:**

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL\* SERVICES: \_\_\_\_\_

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: \_\_\_\_\_

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: \_\_\_\_\_

INTERIM CONTROL MEASURES: (IF APPLICABLE) \_\_\_\_\_

MALFUNCTION REPORTED BY: \_\_\_\_\_    TITLE: \_\_\_\_\_

(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: \_\_\_\_\_    DATE: \_\_\_\_\_    TIME: \_\_\_\_\_

\*SEE PAGE 2



**Please note - This form should only be used to report malfunctions  
applicable to Rule 326 IAC 1-6 and to qualify for  
the exemption under 326 IAC 1-6-4.**

**326 IAC 1-6-1 Applicability of rule**

**Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit  
under 326 IAC 2-5.1 or 326 IAC 2-6.1.**

**326 IAC 1-2-39 "Malfunction" definition**

**Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or  
combustion or process equipment to operate in a normal and u  
sual manner.**

**\* Essential services are interpreted to mean those operations, such as, the providing of electricity  
by power plants. Continued operation solely for the economic benefit of the owner or operator shall  
not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.**

**If this item is checked on the front, please explain rationale:**

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**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**MINOR SOURCE OPERATING PERMIT  
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

<b>Company Name:</b>	<b>Applied Industrial Materials Corporation</b>
<b>Address:</b>	<b>133 Franklin Street</b>
<b>City:</b>	<b>Aurora, Indiana 47001</b>
<b>Phone #:</b>	<b>812-926-3399</b>
<b>MSOP #:</b>	<b>029-11447-00023</b>

I hereby certify that Applied Industrial Materials Corporation is  
☐ still in operation.  
☐ no longer in operation.

I hereby certify that Applied Industrial Materials Corporation is  
☐ in compliance with the requirements of MSOP 029-11447-00023 and its revisions.  
☐ not in compliance with the requirements of MSOP 029-11447-00023 and its revisions.

<b>Authorized Individual (typed):</b>	<b>Mr. Dennis Wheeland</b>
<b>Title:</b>	
<b>Signature:</b>	
<b>Date:</b>	

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

<b>Noncompliance:</b>

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**MINOR SOURCE OPERATING PERMIT  
SEMI-ANNUAL COMPLIANCE MONITORING REPORT**

**Source Name:** Applied Industrial Materials Corporation  
**Source Address:** 133 Franklin Street, Aurora, Indiana 47001  
**Mailing Address:** P.O. Box 340 Aurora, Indiana 47001  
**MSOP Permit No.:** 029-11447-00023

**Months:** \_\_\_\_\_ **to** \_\_\_\_\_ **Year:** \_\_\_\_\_

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted semi-annually. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

**9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.**

**9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.**

Compliance Monitoring Requirement (e.g. Permit Condition D.1.3)	Number of Deviations	Date of each Deviation

**Form Completed By:** \_\_\_\_\_

**Title/Position:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Phone:** \_\_\_\_\_

**Attach a signed certification to complete this report.**

## **Indiana Department of Environmental Management Office of Air Quality**

### **Technical Support Document (TSD) for a Minor Source Operating Permit Minor Permit Revision**

#### **Source Background and Description**

<b>Source Name:</b>	<b>Applied Industrial Materials Corporation</b>
<b>Source Location:</b>	<b>133 Franklin Street, Aurora, Indiana 47001</b>
<b>County:</b>	<b>Dearborn</b>
<b>SIC Code:</b>	<b>3295</b>
<b>Operation Permit No.:</b>	<b>MSOP 029-11447-00023</b>
<b>Issuance Date:</b>	<b>August 16, 2000</b>
<b>First Minor Permit Revision:</b>	<b>MPR 029-13867-00023</b>
<b>Permit Reviewer:</b>	<b>Gurinder Saini</b>

The Office of Air Quality (OAQ) has reviewed a revision application from Applied Industrial Materials Corporation relating to the operation of a custom blended metallurgical processing source.

#### **History**

On February 12, 2001, Applied Industrial Materials Corporation submitted an application to OAQ to add a raw material bucket elevator and baghouse for the existing Briquette Bin. Applied Industrial Materials Corporation was issued a MSOP on August 16, 2000.

#### **Permitted Emission Units and Pollution Control Equipment**

The modification consists of the following permitted emission units and pollution control devices:

- (a) one (1) bucket elevator for loading the Briquette bin, with a maximum capacity of 36 tons per hour and using a baghouse to control dust, and exhausting to stack 4.

#### **Existing Approvals**

This source has been issued a Minor Source Operating Permit MSOP 029-11447-00023 on August 16, 2000. This is the first request for revision to this permit.

#### **Enforcement Issue**

There are no enforcement actions pending.

## Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
Stack 4	Bucket Elevator	40	TBD	4364	70

*TBD- To be determined.*

## Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on February 12, 2001.

## Emission Calculations

See Appendix A page 1 of 1 of this document for detailed emissions calculations.

## Potential To Emit of Revision Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.@

Pollutant	Potential To Emit (tons/year)
PM	85
PM-10	20.4
SO <sub>2</sub>	-
VOC	-
CO	-
NO <sub>x</sub>	-

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM and PM-10 are equal to or greater than 25 tons per year. Therefore, this modification is subject to the provisions of 326 IAC 2-6.1-6 (h) and should be processed as Significant Permit Revision.

However, the source has agreed to control the particulate matter emissions from this emission unit with a Baghouse. Therefore, this modification is subject to 326 IAC 2-6.1-6 (g) (5) (c) wherein, if the PTE for particulate matter from a modification is limited to less than 25 tons per year, using a control device meeting the following criteria, it shall be processed as a minor permit revision:

- (i) Achieving and maintaining ninety-nine percent (99%) efficiency.
- (ii) Complying with a no visible emission standard.
- (iii) The potential to emit before air pollution controls does not exceed major source thresholds for federal permitting programs.
- (iv) Certifying to the commissioner that the air pollution control device supplier

guarantees that a specific outlet concentration, in conjunction with design air flow, will result in actual emissions less than twenty-five (25) tons of particulate matter (PM) or fifteen (15) tons per year of particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM<sub>10</sub>).

- (b) **Fugitive Emissions**  
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

### County Attainment Status

The source is located in Dearborn County.

Pollutant	Status
PM-10	Attainment
SO <sub>2</sub>	Unclassifiable/Attainment
NO <sub>2</sub>	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Dearborn County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Dearborn County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

### Proposed Modification After Control

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable):

Pollutant	PM (ton/yr)	PM10 (ton/yr)	SO <sub>2</sub> (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO <sub>x</sub> (ton/yr)
Proposed Modification	0.85	0.2	-	-	-	-
PSD	250	250	250	250	250	250

The emissions from the proposed modification in the above table are after employing baghouse for controlling particulate matter emission with 99% control efficiency.

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

## Source Status

Existing Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions from Previous Permit (tons/year)	Emissions from this Permit Revision (tons/year)	Total Controlled and/or Limited Emissions after issuance of this Permit (tons/year)
PM	31.1	0.85	31.95
PM10	7.88	0.2	8.08
SO <sub>2</sub>	0.014	-	0.014
VOC	0.131	-	0.131
CO	2.0	-	2.0
NO <sub>x</sub>	2.38	-	2.38

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.
- (b) These emissions were based on Technical Support Document for MSOP 029-11447-00023.

Existing Source MSOP Definition (emissions before controls, based on 8,760 hours of operation per year at rated capacity and control equipment not considered unless integral):

Pollutant	Potential to Emit from Previous Permit (tons/year)	Potential to Emit from this Permit Revision (tons/year)	Total Potential to Emit after issuance of this Permit (tons/year)
PM	283	85	368
PM10	76.2	20.4	96.8
SO <sub>2</sub>	0.014	-	0.014
VOC	0.131	-	0.131
CO	2.0	-	2.0
NO <sub>x</sub>	2.38	-	2.38

## Part 70 Permit Determination

### 326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit MPR 029-13867-00023, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source.

### **Federal Rule Applicability**

- (a) This source is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.670, Subpart OOO, because as per the definition of Nonmetallic Mineral Processing facility, the processing of nonmetallic minerals must include crushing or grinding.

In the revisions to Subpart OOO, published in the June 9, 1997 Federal Register on page 31354, the comments section specifically clarifies that EPA did not intend to regulate stand-alone screening operations at plants that have no crushers. Plants that do not employ crushing or grinding, by definition, are not considered nonmetallic mineral processing plants and thus are not subject to Subpart OOO.

Therefore, since this source only colors and packages aggregate, NSPS Subpart OOO is not applicable to this source.

- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

### **State Rule Applicability - Entire Source**

#### **326 IAC 2-6 (Emission Reporting)**

This source is located in Dearborn County and the potential to emit VOC and NO<sub>x</sub> pollutant is less than ten (10) tons per year. The source's potential to emit PM<sub>10</sub> is less than one-hundred (100) tons per year including fugitive emissions, therefore, 326 IAC 2-6 does not apply.

The source will be required to annually submit a statement of the actual emissions of all federally regulated pollutants from the source, for the purpose of fee assessment.

#### **326 IAC 5-1 (Visible Emissions Limitations)**

This Source is located in Aurora and not in Lawrenceburg Township in Dearborn County. Therefore, pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### **326 IAC 6-1 (Particulate Rules: Non-attainment Area Limitations)**

This Source has a potential to emit of particulate matter before controls, more than 100 tons per year. The Source is located in Dearborn County, which is listed under 326 IAC 6-1-1.7. Therefore this Source is subject to 326 IAC 6-1-2 (g). Pursuant to 326 IAC 6-1-2 (Particulate emission limitations: mineral aggregate operations), mineral aggregate operations shall be limited to the following:

- (a) All operations, which are completely enclosed, shall not allow or permit discharge to the atmosphere of any gases, which contain particulate matter in excess of 0.03 grain per dry standard cubic foot (dscf).
- (b) Shall comply with requirements of 326 IAC 2, 326 IAC 5-1 and 326 IAC 6-4.



### Minor Source Modeling Pilot Program

This modification is not subject to the modeling requirements, because the PTE after control of all criteria pollutants due to this modification is less than PSD significant thresholds.

### State Rule Applicability - Individual Facilities

#### 326 IAC 6-1 (Particulate Rules: Non-attainment Area Limitations)

Pursuant to this rule, the particulate matter emissions from the Baghouse controlling the Bucket Elevator shall not exceed 0.03 grains per dscf.

The exhaust flow from the baghouse is at ambient temperature. Therefore, the actual airflow is equal to the dry airflow from this source.

$$\begin{aligned} \text{Therefore particulate matter emission limit} &= \frac{0.03 \text{ grains}}{\text{dscf}} \times \frac{1 \text{ pound}}{7000 \text{ grains}} \times \frac{4364 \text{ dscf}}{\text{minute}} \times \frac{60 \text{ min}}{1 \text{ hour}} \\ &= 1.1 \text{ lbs/hour} \end{aligned}$$

The potential to emit after 99% efficiency of controls from this modification for PM is 0.85 lbs/hour.

Therefore, this modification will comply with this limit

### Testing Requirements

The Source-wide PM-10 potential to emit after this modification is near the threshold for major source under 326 IAC 2-7 Part 70 Operating Permit. Therefore, to ensure the non applicability of 326 IAC 2-7, the Permittee is required to stack test within six (6) months of issuance of this permit on the baghouse stack exhaust 4, for PM and PM-10 to ensure that, the Source-wide PM-10 emissions are less than 100 tons per year and also comply with requirements of 326 IAC 6-1-2.

### Compliance Requirements

The Permittee is not required to monitor the Visible Emission notations from stack 4 because there is a control devise associate with the bucket elevator and allowable emissions from this emission unit are less than 10 lbs / hour.

### Permit Changes

The permit is modified to incorporate this new equipment as follows (the language deleted is shown in ~~strikeout~~ and added is shown in **bold**):

1. A new description (f) is added in Condition A.2 of the permit as follows:  

**(f) one (1) bucket elevator for loading the Briquette bin, with a maximum capacity of 36 tons per hour and using a baghouse to control dust, and exhausting to stack 4.**
2. A new Section D.2 is added to the permit as follows

## SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (f) one (1) bucket elevator for loading the Briquette bin, with a maximum capacity of 36 tons per hour and using a baghouse to control dust, and exhausting to stack 4.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

#### D.2.1 Nonattainment Area Particulate Limitations [326 IAC 6-1-2]

Pursuant to this rule, the particulate matter emissions from the Baghouse controlling the Bucket Elevator shall not exceed 0.03 grains per dscf.

#### D.2.2 Particulate Matter Control Device [326 IAC 2-6.1-6 (g)(5) (C)]

Pursuant to this rule, the baghouse should be operated with a control efficiency of 99%. Therefore, this modification is not subject to 326 IAC 2-6.1-6 (j) Significant Permit Revision Procedure.

#### D.2.3 Nonapplicability of NSPS Subpart OOO

This source is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.670, Subpart OOO), because as per the definition of Nonmetallic Mineral Processing facility, the processing of nonmetallic minerals must include crushing or grinding.

### Compliance Determination Requirements [326 IAC 2-1.1-11]

#### D.2.4 Testing Requirements [326 IAC 2-1.1-11]

Within six (6) months of issuance of this permit, the Permittee shall perform PM and PM<sub>10</sub> testing on the baghouse stack exhaust 4 to show compliance with conditions D.2.1 and D.2.2. The testing shall utilize Methods 5 or 17 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM<sub>10</sub> includes filterable and condensable PM<sub>10</sub>. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance.

#### D.2.5 Baghouse

The baghouse shall be in operation and control emissions from the bucket elevator at all times, when the bucket elevator is in operation, in order to comply with this limit.

### Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

#### D.2.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across baghouse used in conjunction with the bucket elevator, at least once weekly when the loading unloading process is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across this baghouse shall be maintained within the

range of 3.0 and 4.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### **D.2.7 Baghouse Inspections**

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An inspection shall be performed each calendar quarter of all bags controlling bucket elevator when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

#### **D.2.8 Broken or Failed Bag Detection**

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In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

**Record Keeping and Reporting Requirement [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]**

#### **D.2.9 Record Keeping Requirements**

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- (a) To document compliance with Condition D.2.5, the Permittee shall maintain records of the results of the inspections required under Condition D.2.5 and the dates the vents are redirected.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

3. In addition it has been determined that the applicability of PM emission limit under 326 IAC 6-3-2 was incorrectly applied in the permit. The correct PM limit is based on 326 IAC 6-1-2. The condition D.1.1 of the permit is modified as follows:

#### ~~D.1.1 Particulate Matter (PM) [326 IAC 6-3]~~

- ~~(a) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from Unit 2 shall not exceed 19.2 pounds per hour when operating at a process weight rate of 20,000 pounds per hour.~~

~~The pounds per hour limitation was calculated with the following equation:~~

~~Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:~~

~~$E = 4.10 P^{0.67}$  where  $E$  = rate of emission in pounds per hour; and  
 $P$  = process weight rate in tons per hour.~~

- ~~(b) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from Unit 1 stacks S1a through S1e and Unit 3 stacks S3a through S3f shall not exceed 30.5 pounds per hour, each, when operating at a process weight rate of 40,000 pounds per hour, each.~~

~~The pounds per hour limitation was calculated with the following equation:~~

~~Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:~~

~~$E = 4.10 P^{0.67}$  where  $E$  = rate of emission in pounds per hour; and  
 $P$  = process weight rate in tons per hour.~~

#### **D.1.1 Nonattainment Area Particulate Limitations [326 IAC 6-1-2]**

**Pursuant to this rule, the particulate matter emissions from the Baghouses controlling the Unit 1, Unit 2 and Unit 3 shall not exceed 0.03 grains per dscl from each emission unit.**

### **Conclusion**

The construction and operation of this raw material bucket elevator and baghouse shall be subject to the conditions of the attached proposed Minor Permit Revision to Minor Source Operating Permit 029-13867-00023.

**Appendix A: Emission Calculations  
Storage Bin Loading System**

Page 1 of 1 TSD App A

**Company Name: Applied Industrial Material Corporation (Aim Co)**  
**Address City IN Zip: 133 Franklin Street, Aurora, IN 47001**  
**CP#: 029-138671**  
**Plt ID: 029-00023**  
**Reviewer: Gurinder Saini**  
**Date: 04/04/2001**

Process	Material Type	Material handled tons/hour	Pollutant	Control efficiency %age	Controlled Emission Factor***** pounds/ton	Controlled Emission rate pounds/hour	Controlled Emission rate tons/year	Emission Factor* pounds/ton	Emission rate pounds/ hour	Emission rate tons/year
Storage bin loading	Fluorspar*	27.7	PM	99.00%	0.01	0.19	0.85	0.70	19.39	84.93
		27.7	PM-10***	99.00%	0.00	0.05	0.20	0.17	4.65	20.38
Storage bin loading	Fused Alumina**	36	PM	99.00%	0.0026	0.0936	0.41	0.26	9.36	41.00
		36	PM-10****	99.00%	0.0006	0.0225	0.10	0.06	2.25	9.84
These two material are alternative operation options for this elevator. The worst case emissions are:										
										84.93
										20.38

\* Fluorspar has a density of 100 lb/cuft and has characteristics similar to talc processing under (AP-42 11.26)  
emission factor for controlled emissions is 0.0035 pounds per 1000 pounds processed

\*\* Fused Alumina has a density of 130 lb/cuft and has characteristics similar to Sand and Gravel processing under (AP-42 11.19)  
emission factor for controlled emissions is 0.0013 pounds per 1000 pounds processed

\*The uncontrolled emission factors are derived from back calculation based on control efficiency of 99%

\*\*PM-10 is 24% of total PM. This ratio is based on AP-42 Figure 11.26-2